## **REMARKS**

By this amendment, Applicants have amended claims 15 and 18-19 and added new claims 25-26. As a result, claims 1-3, 7-8, 10-11, 13-21 and 23-26 are pending in this application. These amendments are being made to facilitate early allowance of the presently claimed subject matter. Applicants do not acquiesce in the correctness of the objections and rejections and reserve the right to pursue the full scope of the subject matter of the original claims in a subsequent patent application that claims priority to the instant application.

Reconsideration in view of the following remarks is respectfully requested.

In the Office Action, claims 1-3, 7, 8, 10, 11, 13, 14, 21, 23 and 24 are allowed and claims 18 and 19 are objected to as being dependent upon a rejected base claim. Applicants thank the Examiner for noticing the patentable subject matter of these claims. By this amendment, Applicants have rewritten claims 18 and 19 in independent form. As a result, Applicants submit that these claims are in condition for allowance.

Additionally, the Office rejects claims 15-17 and 20 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 4,236,124 (Rockwood) in view of U.S. Patent No. 5,767,969 (Chevalier). With respect to claim 15, even if, arguendo, the combination of Rockwood and Chevalier is proper, Applicants respectfully submit that such a combination fails to teach or suggest the claimed invention. In particular, Applicants note that, contrary to the Office's assertion, Rockwood's diode laser does not comprise a heterodimensional diode as in the claimed invention. To this extent, Rockwood's diode laser does not include a two-dimensional carrier gas as in the claimed invention. Further, Chevalier fails to teach or suggest using a voltage applied to the heterodimensional diode to adjust a frequency of a plasma wave in

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a two-dimensional carrier gas in the heterodimensional diode. To the contrary, Chevalier teaches changing a laser frequency by applying a voltage to a laser diode, which in turn generates the laser. As a result, Applicants respectfully request withdrawal of the rejection of claim 15 and claims 16-17 and 20, which depend therefrom, as allegedly being unpatentable over Rockwood in view of Chevalier. Further, Applicants submit that newly added claims 25-26, which depend from claim 15, are allowable as presented.

Applicants submit that each of the rejected pending claims is patentable for one or more additional unique features. To this extent, Applicants do not acquiesce to the Office's interpretation of the claimed subject matter or the references used in rejecting the claimed subject matter. Additionally, Applicants do not acquiesce to the Office's combinations and modifications of the combined references or the motives cited for such combinations and modifications. These features and the appropriateness of the Office's combinations and modifications have not been separately addressed herein for brevity. However, Applicants reserve the right to present such arguments in a later response should one be necessary.

In light of the above, Applicants respectfully submit that all currently pending claims are now in condition for allowance. Should the Examiner require anything further to place the application in better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the number listed below.

Respectfully submitted,

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